

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☒ The attached application, or
- ☐ Application No. _____, filed on _____,
- ☐ as amended on _____ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and

All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

FULL NAME OF INVENTOR(S)

Inventor one M. Adrian Michalick Date: 04 MAY 2001

Signature: [Signature] Citizen of: United States

Inventor two _____ Date: _____

Signature: _____ Citizen of: _____

Inventor three _____ Date: _____

Signature: _____ Citizen of: _____

Inventor four _____ Date: _____

Signature: _____ Citizen of: _____

☐ Additional inventors are being named on _____ additional form(s) attached hereto.

Burden Hour Statement: This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is used by the public to file (and the PTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 1 minute to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.
DE 7038474 v1

ASSIGNMENT OF PATENT APPLICATION

SOLE

WHEREAS, M. Adrian Michalicek, of 10752 Ross Court, Westminster, CO 80021; hereinafter referred to as "Assignor," is the inventor of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: HIDDEN FLEXURE ULTRA PLANAR OPTICAL ROUTING ELEMENT

Filing Date: 5/4/01

Application No.: _____; and

WHEREAS, Network Photonics, Inc., located at 4775 Walnut Street, Boulder, CO, 80301, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has assigned, and by these presents does assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on any patent application claiming priority from the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignor had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees that Assignor will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Assignor hereby authorizes and requests Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th Floor, San Francisco, CA 94111-3834, to insert herein above the application number and filing date of said application when known.

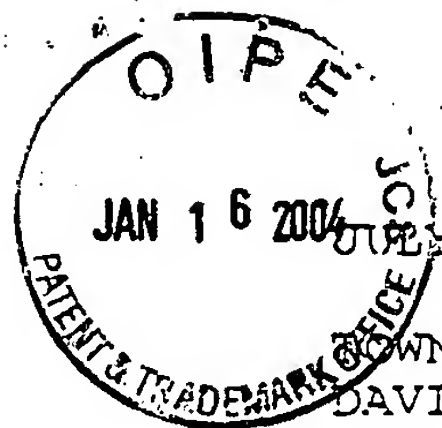
IN TESTIMONY WHEREOF, Assignor has signed his/her name on the date indicated.

Dated: 04 MAY 2001


M. Adrian Michalicek

DE 7038482 v1

JUL 31



JUL 29, 2003

PTAS

TOWNSEND AND TOWNSEND AND CREW LLP
DAVID N. SLONE
TWO EMBARCADERO CENTER, 8TH FLOOR
SAN FRANCISCO, CA 94111-3834



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

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UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/25/2003

REEL/FRAME: 013828/0575

NUMBER OF PAGES: 11

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

NETWORK PHOTONICS, INC.

DOC DATE: 06/17/2003

ASSIGNEE:

PTS CORPORATION, A DELAWARE
CORPORATION
101 INNOVATION DRIVE
SAN JOSE, CALIFORNIA 95134

SERIAL NUMBER: 10148710

PATENT NUMBER:

FILING DATE: 11/18/2002

ISSUE DATE:

SERIAL NUMBER: 10278182

PATENT NUMBER:

FILING DATE: 10/21/2002

ISSUE DATE:

SERIAL NUMBER: 09551256

PATENT NUMBER:

FILING DATE: 04/18/2000

ISSUE DATE:

SERIAL NUMBER: 09658158

PATENT NUMBER:

FILING DATE: 09/08/2000

ISSUE DATE:

013828/0575 PAGE 2

SERIAL NUMBER: 09747064
PATENT NUMBER:

FILING DATE: 12/20/2000
ISSUE DATE:

SERIAL NUMBER: 10241105
PATENT NUMBER:

FILING DATE: 09/10/2002
ISSUE DATE:

SERIAL NUMBER: 09706489
PATENT NUMBER:

FILING DATE: 11/03/2000
ISSUE DATE:

SERIAL NUMBER: 10076182
PATENT NUMBER:

FILING DATE: 02/12/2002
ISSUE DATE:

SERIAL NUMBER: 10171434
PATENT NUMBER:

FILING DATE: 06/12/2002
ISSUE DATE:

SERIAL NUMBER: 60363724
PATENT NUMBER:

FILING DATE: 03/11/2002
ISSUE DATE:

SERIAL NUMBER: 10243924
PATENT NUMBER:

FILING DATE: 09/12/2002
ISSUE DATE:

SERIAL NUMBER: 09782882
PATENT NUMBER:

FILING DATE: 02/13/2001
ISSUE DATE:

SERIAL NUMBER: 09859069
PATENT NUMBER:

FILING DATE: 05/15/2001
ISSUE DATE:

SERIAL NUMBER: 10161838
PATENT NUMBER:

FILING DATE: 06/03/2002
ISSUE DATE:

SERIAL NUMBER: 60252784
PATENT NUMBER:

FILING DATE: 11/22/2000
ISSUE DATE:

SERIAL NUMBER: 09799916
PATENT NUMBER:

FILING DATE: 03/05/2001
ISSUE DATE:

SERIAL NUMBER: 09899013
PATENT NUMBER:

FILING DATE: 07/03/2001
ISSUE DATE:

SERIAL NUMBER: 09899002
PATENT NUMBER:

FILING DATE: 07/03/2001
ISSUE DATE:

SERIAL NUMBER: 09899001
PATENT NUMBER:

FILING DATE: 07/03/2001
ISSUE DATE:

SERIAL NUMBER: 10300438
PATENT NUMBER:

FILING DATE: 11/19/2002
ISSUE DATE:

SERIAL NUMBER: 10087040
PATENT NUMBER:

FILING DATE: 02/28/2002
ISSUE DATE:

SERIAL NUMBER: 09899014
PATENT NUMBER:

FILING DATE: 07/03/2001
ISSUE DATE:

013828/0575 PAGE 3

SERIAL NUMBER: 09898988
PATENT NUMBER:

FILING DATE: 07/03/2001
ISSUE DATE:

SERIAL NUMBER: 09899104
PATENT NUMBER:

FILING DATE: 07/06/2001
ISSUE DATE:

SERIAL NUMBER: 09880230
PATENT NUMBER: 6600591

FILING DATE: 06/12/2001
ISSUE DATE: 07/29/2003

SERIAL NUMBER: 09954662
PATENT NUMBER:

FILING DATE: 09/12/2001
ISSUE DATE:

SERIAL NUMBER: 10216600
PATENT NUMBER:

FILING DATE: 08/09/2002
ISSUE DATE:

SERIAL NUMBER: 09941325
PATENT NUMBER:

FILING DATE: 08/28/2001
ISSUE DATE:

SERIAL NUMBER: 10093844
PATENT NUMBER:

FILING DATE: 03/08/2002
ISSUE DATE:

SERIAL NUMBER: 10279388
PATENT NUMBER:

FILING DATE: 10/23/2002
ISSUE DATE:

SERIAL NUMBER: 09992087
PATENT NUMBER:

FILING DATE: 11/12/2001
ISSUE DATE:

SERIAL NUMBER: 09992849
PATENT NUMBER:

FILING DATE: 11/12/2001
ISSUE DATE:

SERIAL NUMBER: 10118070
PATENT NUMBER:

FILING DATE: 04/05/2002
ISSUE DATE:

SERIAL NUMBER: 10099392
PATENT NUMBER:

FILING DATE: 03/13/2002
ISSUE DATE:

SERIAL NUMBER: 10098805
PATENT NUMBER:

FILING DATE: 03/13/2002
ISSUE DATE:

SERIAL NUMBER: 10306826
PATENT NUMBER:

FILING DATE: 11/26/2002
ISSUE DATE:

SERIAL NUMBER: 10808789
PATENT NUMBER:

FILING DATE:
ISSUE DATE:

SERIAL NUMBER: 10095794
PATENT NUMBER:

FILING DATE: 03/11/2002
ISSUE DATE:

SERIAL NUMBER: 10093843
PATENT NUMBER:

FILING DATE: 03/08/2002
ISSUE DATE:

SERIAL NUMBER: 10150810
PATENT NUMBER:

FILING DATE: 05/17/2002
ISSUE DATE:

013828/0575 PAGE 4

SERIAL NUMBER: 10126189
PATENT NUMBER:

FILING DATE: 04/19/2002
ISSUE DATE:

SERIAL NUMBER: 10401416
PATENT NUMBER:

FILING DATE: 03/28/2003
ISSUE DATE:

SERIAL NUMBER: 10147181
PATENT NUMBER:

FILING DATE: 05/15/2002
ISSUE DATE:

SERIAL NUMBER: 10242213
PATENT NUMBER:

FILING DATE: 09/12/2002
ISSUE DATE:

SERIAL NUMBER: 10262404
PATENT NUMBER:

FILING DATE: 09/30/2002
ISSUE DATE:

SERIAL NUMBER: 09442061
PATENT NUMBER: 6501877

FILING DATE: 11/16/1999
ISSUE DATE: 12/31/2002

SERIAL NUMBER: 09745760
PATENT NUMBER: 6542657

FILING DATE: 12/20/2000
ISSUE DATE: 04/01/2003

SERIAL NUMBER: 09745459
PATENT NUMBER: 6535664

FILING DATE: 12/20/2000
ISSUE DATE: 03/18/2003

SERIAL NUMBER: 09615300
PATENT NUMBER: 6449096

FILING DATE: 07/13/2000
ISSUE DATE: 09/10/2002

SERIAL NUMBER: 09669758
PATENT NUMBER: 6517734

FILING DATE: 09/26/2000
ISSUE DATE: 02/11/2003

SERIAL NUMBER: 09748687
PATENT NUMBER: 6490089

FILING DATE: 12/21/2000
ISSUE DATE: 12/03/2002

SERIAL NUMBER: 06275888
PATENT NUMBER: 4381387

FILING DATE: 06/22/1981
ISSUE DATE: 04/26/1983

SERIAL NUMBER: 09837362
PATENT NUMBER: 6525352

FILING DATE: 04/18/2001
ISSUE DATE: 02/25/2003

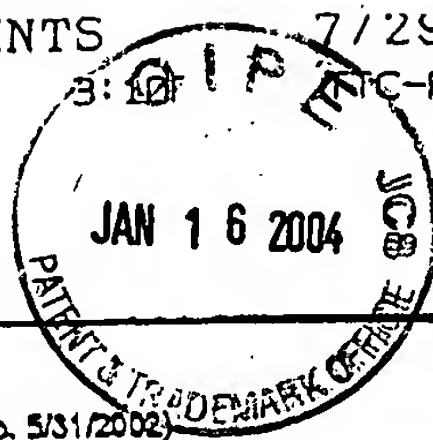
SERIAL NUMBER: 09899000
PATENT NUMBER: 6535319

FILING DATE: 07/03/2001
ISSUE DATE: 03/18/2003

SERIAL NUMBER: 09941998
PATENT NUMBER: 6439728

FILING DATE: 08/28/2001
ISSUE DATE: 08/27/2002

SHARON LATIMER, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

07/25/2003
700037867

Attorney Docket No. 019930-000000US

Form PTO-1595

(Rev. 10-02)

OMB No. 0651-0027 (exp. 5/31/2002)

Recordation Form Cover Sheet
PATENTS ONLYU.S. Department of Commerce
U.S. Patent and Trademark Office

Tab settings ⇨⇨⇨ ▼

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Network Photonics, Inc.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No.

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other:

Execution Date: June 17, 2003

2. Name and address of receiving party(ies)

Name: PTS Corporation

Internal Address: A Delaware Corporation

Street Address: 101 Innovation Drive

City: San Jose

State: CA

ZIP: 95134

Additional name(s) and address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No(s):

10/148,710

10/278,182

09/551,256

09/658,158

09/747,064

B. Patent No(s):

6,501,877

6,542,657

6,535,664

6,449,096

6,517,734

Additional numbers attached? ☒ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: David N. Slone
TOWNSEND AND TOWNSEND AND CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
(650) 326-2400

6. Total number of applications and patents involved: 55

7. Total fee (37 CFR 3.41): \$2200.00

☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number: 20-1430

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

David N. Slone
Atty. Reg. No. 28,572
SignatureJuly 25, 2003
Date

Total number of pages including cover sheet, attachments and documents: 11

Mail documents to be recorded with required cover sheet information to:

Mail Stop Assignment Recordation Services
Director of the U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

01/11/01 09:10:00 2003-07-25 11:00

Form PTO-1505
Recordation Form Cover Sheet
Patents Only
Page 2

1. Additional name(s) of conveying party(ies):
(Continued from Page 1)
2. Additional name(s) and address(es) of receiving party(ies):
(Continued from Page 1)
3. Additional application number(s) or patent number(s):
(Continued from Page 1)

A. Patent Application No.(s)

10/241,105

09/706,489

10/076,182

10/171,434

60/363,724

10/243,924

09/782,882

09/859,069

10/161,838

60/252,784

09/799,916

09/899,013

09/899,002

09/899,001

10/300,438

10/087,040

09/899,014

09/898,988

09/899,004

09/880,230

09/954,662

10/216,600

09/941,325

10/093,844

10/279,388

09/992,087

09/992,849

10/118,070

10/099,392

10/098,805

10/306,826

10/080,789

10/095,794

10/093,843

10/150,810

10/126,189

10/401,416

10/147,181

10/242,213

10/262,404

B. Patent No.(s)

6,490,089

6,381,387

6,525,352

6,535,319

6,439,728

EXHIBIT 3.02(b)

PATENT ASSIGNMENT

ASSIGNMENT AND TRANSFER OF PATENTS

WHEREAS, Network Photonics, Inc., a Delaware corporation, with offices at 4775 Walnut Street, Boulder, Colorado 80301 ("Assignor") owns certain patent applications and/or registrations, as listed in Exhibit A attached hereto and incorporated herein by this reference ("Patents"); and

WHEREAS, PTS Corporation, a Delaware corporation, with offices at 101 Innovation Drive, San Jose, California 95134 ("Assignee"), desires to acquire all of the right, title and interest of Assignor in, to and under the Patents;

WHEREAS, Assignor and Assignee have entered into a certain Asset Purchase Agreement, dated as of June 17, 2003 ("Assignment Agreement"), assigning, among other things, all right, title and interest in, to and under the Patents and in, to and under the registrations for same from Assignor to Assignee;

NOW, THEREFORE, for good and valuable consideration described in the Assignment Agreement, the receipt and sufficiency of which are hereby acknowledged, Assignor does hereby irrevocably sell, assign, transfer and convey unto Assignee all of its right, title and interest in and to the Patents, including all patent applications and divisions, continuations, continuations-in-part, reexaminations, substitutions, reissues, extensions and renewals of the applications and registrations for the Patents (and the right to apply for any of the foregoing); all rights to causes of action and remedies related thereto (including, without limitation, the right to sue for past, present or future infringement, misappropriation or violation of rights related to the foregoing); and any and all other rights and interests arising out of, in connection with or in relation to the Patents throughout the universe, including without limitation all foreign counterparts and foreign equivalents of any of the foregoing.

Assignor authorizes and requests the patent officials in the United States and in any and all foreign jurisdictions to issue any and all letters patent and foreign counterparts or equivalents thereof to PTS Corporation, as assignee of the entire interest of Assignor therein, and covenants that Assignor has full right to convey the entire interest herein assigned and that Assignor has not executed and will not execute any agreements in conflict herewith.

Assignor further agrees, for itself, its successors and assigns, to execute such further documents and to perform such further lawful acts as may reasonably be required to effectuate this assignment.

IN WITNESS WHEREOF, Assignor has caused this assignment to be duly executed by an authorized officer on this 17th day of June, 2003.

Network Photonics, Inc.

By: [Signature]
Name: Steve Georgis
Title: President & CEO

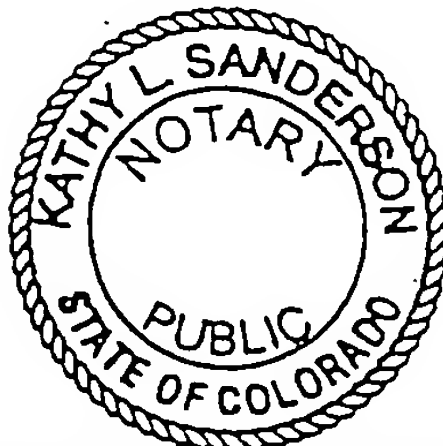
STATE OF Colorado)
) ss.
COUNTY OF Boulder)

On June 17, 2003, before me, the undersigned notary public in and for said County and State, personally appeared Steve Georgis

X personally known to me [or]
_____ proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) Steve Georgis subscribed to the within instrument and acknowledged to me that Steve Georgis executed the same in his authorized capacity(ies) and that, by his signature(s) on the instrument, the person(s), the entity(ies) upon behalf of which the person(s) acted executed the instrument.

Witness my hand and official seal.



My Commission Expires 04/07/04

[Signature: Kathy L. Sanderson]

My commission expires on

April 7, 2004
Kathy L. Sanderson
4775 Walnut Street
Boulder, CO 80301

EXHIBIT A

PATENTS

TTC Ref Country ATTY(s) Handling	Title	Inventor	Application No.	Filing Date	Patent No.	Issue I
019930-000100 US (DNS)	Wavelength Router	Weverka, Robert T. Roth, Richard S.	09/442061	11/16/1999	6501877	12/31/
019930-000110 CA (DNS)	Wavelength Router	Weverka, Robert T. Georgis, Steven P. Roth, Richard S.	2389622	11/14/2000		
019930-000110 CN (DNS)	Wavelength Router	Weverka, Robert T. Georgis, Steven P. Roth, Richard S.	00815769.3	11/14/2000		
019930-000110 EP (DNS)	Wavelength Router	Weverka, Robert T. Georgis, Steven P. Roth, Richard S.	00983709.7	11/14/2000		
019930-000110 JP (DNS)	Wavelength Router	Weverka, Robert T. Georgis, Steven P. Roth, Richard S.	2001-538854	11/14/2000		
019930-000110 PC (DNS)	Wavelength Router	Weverka, Robert T. Georgis, Steven P. Roth, Richard S.	00/31448	11/14/2000		
019930-000110 US (DNS)	Wavelength Router	Weverka, Robert T. Georgis, Steven P. Roth, Richard S.	10/148710	5/29/2002		
019930-000120 US (DNS)	Wavelength Router	Weverka, Robert T. Georgis, Steven P. Roth, Richard S.	10/278182	10/21/2002		
019930-000200 CA (DNS)	Wavelength Monitor for WDM Systems	Georgis, Steven P. Weverka, Robert T.	2406369	3/22/2001		
019930-000200 CN (DNS)	Wavelength Monitor for WDM Systems	Georgis, Steven P. Weverka, Robert T.	1811343.5	3/22/2001		
019930-000200 EP (DNS)	Wavelength Monitor for WDM Systems	Georgis, Steven P. Weverka, Robert T.	01928317.5	3/22/2001		
019930-000200 JP (DNS)	Wavelength Monitor for WDM Systems	Georgis, Steven P. Weverka, Robert T.	2001-576415	3/22/2001		

TTC Ref Country ATTY(s) Handling	Title	Inventor	Application No.	Filing Date	Patent No.	Issue I
019930-000940 US PMB (DNS)	Diffraction Grating With Reduced Polarization-Dependent Loss	Fabiny, Larry Sarto, Tony	10/241105	9/10/2002		
019930-001000 PC DJG PMB (DNS)	Reduction of Polarization-Dependent Loss from Grating Used in Double-Pass Configuration	Fabiny, Larry	PCT/US01/47565	11/2/2001		
019930-001000 US DJG PMB (DNS)	Reduction of Polarization-Dependent Loss from Grating Used in Double-Pass Configuration	Fabiny, Larry	09/706489	11/3/2000		
019930-001010 US PMB (DNS)	Reduction of Polarization Dependent Loss from a Grating Used in Double Pass Configuration	Fabiny, Larry	10/076182	2/12/2002		
019930-001020 US PMB (DNS)	Reduction of Polarization-Dependent Loss in Double Pass Configurations	Silveira, Paulo E. X. Sarto, Tony Fabiny, Larry Voitel, Marko	10/171434	6/12/2002		
019930-001100 US PMB (DNS)	Variable Wavelength Attenuator for Spectral Grooming Using Micromirror Routing	Weaver, Samuel P.	60/363724	3/11/2002		
019930-001110 PC PMB (DNS)	Variable Wavelength Attenuator for Spectral Grooming and Dynamic Channel Equalization Using Micromirror Routing	Weaver, Samuel P. Sarto, Andrew W.	PCT/US03/07902	3/11/2003		
019930-001110 US PMB (DNS)	Variable Wavelength Attenuator for Spectral Grooming Using Micromirror Routing	Weaver, Samuel P. Sarto, Anthony W.	10/243924	9/12/2002		
019930-001200 US PMB (DNS)	Focal Length Dispersion Compensation for Field Curvature	Weaver, Samuel P. Cahill, Raymond F.	09/782882	2/13/2001		
019930-001300 PC DJG (DNS)	Athermalization of a Wavelength Routing Element	Wendland Jr., R.G.	01/24242	7/31/2001		
019930-001300 US DJG (DNS)	Athermalization of a Wavelength Routing Element	Wendland Jr., R.G.	09/630817	8/2/2000	6381387	4/30/
019930-001400 US RTB (DNS)	Hidden Flexure Ultra-Planar Optical Routing Element	Michalick, M. A.	09/859069	5/15/2001		
019930-002000 US RTB (DNS)	Optical Routing Elements	Wendland, Jr., R.G.	10/161838	6/3/2002		
019930-002200 US PMB (DNS)	Method to Reduce Release Time of Micromachined Devices	Muller, Lilac Staple, Bevan	60/252784	11/22/2000		
019930-002210 US PMB (DNS)	Method to Reduce Release Time of Micromachined Devices	Muller, Lilac Staple, Bevan	09/837362	4/18/2001	6525352	2/25/

TTC Ref Country ATTY(s) Handling	Title	Inventor	Application No.	Filing Date	Patent No.	Issue D
019930-000200 PC (DNS)	Wavelength Monitor for WDM Systems	Georgis, Steven P. Weverka, Robert T.	PCT/US01/09442	3/22/2001		
019930-000200 US (DNS)	Wavelength Monitor for WDM Systems	Georgis, Steven P. Weverka, Robert T.	09/551256	4/18/2000		
019930-000500 US PMB (DNS)	Linear Optical Beam Translator for Optical Routing	Weaver, Samuel P. Weverka, Robert T. Roth, Richard S.	09/658158	9/8/2000		
019930-000510 PC PMB (DNS)	Linear Optical Beam Translator For Optical Routing	Weaver, Samuel P. Weverka, Robert T. Roth, Richard S.	01/28309	9/7/2001		
019930-000600 PC PMB (DNS)	Binary Switch for an Optical Wavelength Router	Anderson, Robert L.	01/50524	12/20/2001		
019930-000600 US PMB (DNS)	Binary Switch for an Optical Wavelength Router	Anderson, Robert L.	09/745760	12/20/2000	6542657	4/1/2
019930-000700 PC PMB (DNS)	1X2 Optical Wavelength Router	Anderson, Robert L.	01/50441	12/20/2001		
019930-000700 US PMB (DNS)	1X2 Optical Wavelength Router	Anderson, Robert L.	09/745459	12/20/2000	6535664	3/18/2
019930-000800 US PMB (DNS)	Wavelength Router with Staggered Input-Output Fibers	Anderson, Robert L. Weaver, Samuel P.	09/747064	12/20/2000		
019930-000900 US PMB (DNS)	Diffraction Grating with Reduced Polarization-Dependent Loss	Fabiny, Larry Sario, Tony	09/615300	7/13/2000	6449096	9/10/2
019930-000910 US PMB (DNS)	Grating Fabrication Process Using Combined Crystalline- Dependent & Crystalline-Independent Etching	Muller, Lilac Arnett, Kenneth E. Fabiny, Larry Pister, Kristofer S.	09/669758	9/26/2000	6517734	2/11/2
019930-000920 US PMB (DNS)	Diffraction Grating with Reduced Polarization-Dependent Loss	Fabiny, Larry	09/748687	12/21/2000	6490089	12/3/2
019930-000930 PC PMB (DNS)	Diffraction Grating With Reduced Polarization-Dependent Loss	Fabiny, Larry Sario, Tony Muller, Lilac Arnett, Kenneth E. Pisterf, Kristofer	01/22229	7/11/2001		

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019930-002300 US PMB (DNS)	Method for Reducing Leaching in Metal-Coated MEMS	Staple, Bevan Miller, David Muller, Lilac	09/799916	3/5/2001		
019930-002400 US PMB (DNS)	Optical Surface-Mount Lens Cell	Anderson, David Paul	09/899013	7/3/2001		
019930-002500 US PMB (DNS)	MEMS-Based, Non-Contacting, Free-Space Optical Switch	Staple, Bevan Roth, Richard S.	09/899002	7/3/2001		
019930-002600 US PMB (DNS)	Free-Space Optical Wavelength Routing Elements Based on Stepwise Controlled Tilting Mirrors	Buzzetta, Victor Staple, Bevan Marinelli, David	09/899000	7/3/2001	6535319	3/18/2
019930-002700 US PMB (DNS)	Two-Dimensional Free-Space Optical Wavelength Routing Element Based on Stepwise Controlled Tilting Mirrors	Buzzetta, Victor	09/899001	7/3/2001		
019930-002710 US PMB (DNS)	Two-Dimensional Free-Space Optical Wavelength Routing Element Based on Stepwise Controlled Tilting Mirrors	Buzzetta, Victor	10/300438	11/19/2002		
019930-002800 US DMH (DNS)	Systems & Methods for Overcoming Stiction	Miller, David Muller, Lilac Anderson, Robert L.	10/087040	2/28/2002		
019930-003000 US DMH (DNS)	Methods & Apparatus for Providing a Multi-Stop Micromirror	Anderson, David Paul	09/899014	7/3/2001		
019930-003100 US DMH (DNS)	Systems & Methods for Overcoming Stiction Using a Lever	Anderson, David Paul	09/898988	7/3/2001		
019930-003200 US PMB (DNS)	Bistable Mirror with Contactless Stops	Muller, Lilac	09/899004	7/3/2001		
019930-003500 US PMB (DNS)	Micromirror Array Having Adjustable Angles	Anderson, Robert L. Staple, Bevan Roth, Richard S.	09/880230	6/12/2001		
019930-003600 US PMB (DNS)	Dual-Wave Optical Shared Protection Ring	Wahler, Ronald A. Bortolini, Edward J.	09/954662	9/12/2001		
019930-003700 US WFV (DNS)	Method & Apparatus for Protecting Wiring & Integrated Circuit Device	Anderson, Robert L. Reyes, David	10/216600	8/9/2002		

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019930-004000 US PMB (DNS)	MEMS Die Holder	Roberts, Joseph	09/941325	8/28/2001		
019930-004400 US PMB (DNS)	Multimirror Stack for Vertical Integration of MEMS Devices in Two-Position Retroreflectors	Copeland, Frederick	09/941998	8/28/2001	6439728	8/27/2
019930-004500 US PMB (DNS)	Optical Wavelength Cross Connect Architectures Using Wavelength Routing Elements	Bortolini, Edward J. Barthel, Dirk Weverka, Robert T. Iraschko, Rainer R. Morley, George D.	10/093844	3/8/2002		
019930-004510 PC PMB (DNS)	Optical Wavelength Cross Connect Architectures Using Wavelength Routing Elements and Methods For Performing In-Service U	Bortolini, Edward J. Barthel, Dirk Weverka, Robert T. Iraschko, Rainer R. Morley, George D.	PCT/US03/07422	3/10/2003		
019930-004510 US PMB (DNS)	Optical Wavelength Cross Connect Architectures Using Wavelength Routing Elements	Weverka, Robert T.	10/279388	10/23/2002		
019930-005500 US PMB (DNS)	Wavelength Router with a Transmissive Dispersive Element	Fabiny, Larry	09/992087	11/12/2001		
019930-005600 US PMB (DNS)	High Efficiency, Low Polarization Dependent Loss, Lamellar Diffraction-Grating Profile & Production Process	Fabiny, Larry Arnett, Kenneth E.	09/992849	11/12/2001		
019930-005700 US PMB (DNS)	Survivable Ring Transmission System with Multiple Protection Classes	Iraschiko, Rainer R. MacGregor, Michael H Morley, George David Stamatelakis, Demetr Wahler, Ronald A.	10/118070	4/5/2002		
019930-005800 US PMB (DNS)	One-to-M Wavelength Routing Element	Cizek, Nicholas C. Weaver, Samuel Paul	10/099392	3/13/2002		
019930-005900 US G2B PMB (DNS)	Two-By-Two Wavelength Routine Element Using One Two- Position MEMS Mirrors	Cizek, Nicholas C.	10/098805	3/13/2002		
019930-006000 US RCL (DNS)	Method for Sub Network Connection Protection in All Optical Networks	Weverka, Robert T.	10/306826	11/26/2002		

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019930-006100 US PMB (DNS)	Methods for Affirming Switched Status of MEMS Based Devcies	Staple, Bevan Anderson, Robert L.	10/080789	2/21/2002		
019930-007300 PC PMB (DNS)	Tunable DWDM Demultiplexer	Christopher S., Alaimo Bortolini, Edward J. DeFrancesco, Marc Honea, Keith Marinelli, David Mechels, Steven Rice, James Weverka, Robert T. Kiruluta, Andrew J. M. Wood, Christopher Stephen Kaliski, Robert W.	PCT/US03/07899	3/11/2003		
019930-007300 US PMB (DNS)	Tunable DWDM Demultiplexer	Christopher S., Alaimo Bortolini, Edward J. DeFrancesco, Marc Honea, Keith Marinelli, David Mechels, Steven Rice, James Weverka, Robert T. Kiruluta, Andrew J. M.	10/095794	3/11/2002		
019930-007500 US PMB (DNS)	Methods for Performing In-Service Upgrades of Optical Wavelength Cross Connects	Bortolini, Edward J.	10/093843	3/8/2002		
019930-007900 US PMB (DNS)	Bidirectional Wavelength Cross- Connect Architectures Using Wavelength Routing Elements	Bortolini, Edward J. Barthel, Dirk Weverka, Robert T. Weaver, Samuel Paul Silveira, Paulo E. X.	10/150810	5/17/2002		
019930-008000 US PMB (DNS)	Multi-City DWDM Wavelength Link Architectures & Methods for Upgrading	Alaimo, S.Christophe Barthel, Dirk Morley, George David Bortolini, Edward J. Urie, Richard W.	10/126189	4/19/2002		
019930-008100 US PMB (DNS)	Optical Routing Mechanism With Integral Fiber Input/Output Arrangement on MEMS Die	KAPLAN, MICHAEL	10/401416	3/28/2003		

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019930-008200 US PMB (DNS)	Variable-Density Optical Cross Connect Architectures & Upgrades	Weverka, Robert T. Bortolini, Edward J. Urie, Richard W. Clark, Phillip	10/147181	5/15/2002		
019930-008300 US PMB (DNS)	Surfactant-Enhanced Protection of Micromechanical Components from Galvanic Degradation	Staple, Bevan	10/242213	9/12/2002		
019930-008400 US PMB (DNS)	Floating Entrance Guard for Preventing Electrical Short Circuits	Miller, David	10/262404	9/30/2002		
019930-008800 US PMB (DNS)	Equipment Monitoring Techniques for Optical Switching & Wavelength Switching Devices & Systems					